

Amendments to the Claims:

1. (currently amended) A piston compressor (~~5~~) for compression of gaseous media in at least two working chambers, said compressor having a stepped piston (~~1~~) containing a first piston part (~~16~~) and at least one ~~coaxially~~ coaxially arranged second piston part (~~17~~), a first cylinder (~~7~~) for holding the first piston part (~~16~~) and for forming a first working chamber (~~21~~), and at least one second cylinder (~~8~~) for holding the second piston part (~~17~~) and for forming a second working chamber (~~22~~), with the second piston part (~~17~~) having a smaller diameter than the first piston part (~~16~~), with each of the at least two cylinders (~~16, 17~~) being closed by means of a plate (~~2, 9~~) with valve arrangements, and with the second piston part (~~17~~) being passed through an opening (~~20~~) in one of the plates (~~2~~), with the second ~~piston~~ piston part (~~17~~) being arranged at one end (~~27~~) of the first piston part (~~16~~) with the second piston part (~~17~~) forming the front end of the stepped piston (~~1~~), and with the second piston part (~~17~~) forming a cylindrical working chamber (~~22~~), and the first piston part (~~16~~) forming an annular working chamber (~~21~~).
2. (currently amended) The piston compressor as ~~claimed~~ claimed in claim 1, ~~characterized in that~~ wherein the plates (~~2, 9~~) are in the form of disks and bound the working chambers at the end.
3. (currently amended) The piston compressor as claimed in claim 1 ~~or 2~~, ~~characterized in that~~ wherein the plates (~~2, 9~~) are provided with inlet valves (~~3, 13~~) and outlet valves (~~4, 14~~).
4. (currently amended) The piston compressor as claimed in ~~one of claims 1 to 3~~, ~~characterized in that~~ claim 3, wherein the valves (~~3, 4, 13, 14~~) are lamellar valves (~~31~~).

5. (currently amended) The piston compressor as claimed in ~~one of claims 1 to 4,~~
~~characterized in that~~ claim 3, wherein the valves (3, 4, 13, 14) are tongue valves (32).

6. (currently amended) The piston compressor as claimed in ~~one of claims 1 to 5,~~
~~characterized in that~~ claim 3, wherein the valves (3, 4, 13, 14) are individual valves
with spring resetting (33).